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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,722	11/13/2000	Chiyoaki Iijima	107263	4658

25944 7590 07/15/2003

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EXAMINER

NGUYEN, FRANCIS N

ART UNIT PAPER NUMBER

2674

DATE MAILED: 07/15/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

B

Office Action Summary

Application No.

09/709,722

Applicant(s)

IIJIMA ET AL.

Examiner

FRANCIS NGUYEN

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(10)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9 is/are rejected.
- 7) ☒ Claim(s) 2-8, 10-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. The amendment filed on 2/13/2003 is entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizutome et al. (US Patent 6,037,920).

As to **claim 1**, Mizutome et al. discloses a liquid crystal driving method for a liquid crystal panel (see Abstract, column 1, lines 36-41) having a liquid crystal between a pair of electrodes (in which optical characteristics of the liquid crystal are changed by applying a driving signal between the pair of electrodes (column 1, lines 50-54), comprising the steps of

sensing a temperature of at least one of the liquid crystal panel and an environment in which the liquid crystal panel is disposed (**thermistor 102 detecting temperature of LCD 101**, column 2, lines 65-67),

applying a low frequency signal as the driving signal in case that the sensed temperature is low, the low frequency signal being lower than a frequency signal used in the case that the

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sensed temperature is normal (column 4, lines 22-52, **frequency 7-26 Hz for temperature range 5-30 deg C** column 6, lines 20-24).

As to **claim 9**, Mizutome et al. discloses a liquid crystal device comprising a liquid crystal panel having a liquid crystal between a pair of substrates (column 1, lines 44-49) and a driving circuit (**drive voltage generation circuit 104, scanning electrode circuit 103a and a data electrode drive circuit 103b** , column 3, lines 23-25) that applies a driving signal between the pair of substrates and that varies optical characteristics of the liquid crystal, the liquid crystal device comprising:

a temperature sensor that senses a temperature of at least one of the liquid crystal panel and an environment in which the liquid crystal panel is disposed (**thermistor 102 attached onto liquid crystal panel 101**, column 2, lines 65-67); and

temperature compensating device (**panel control circuit 105 controls time of application** column 4, lines 61-67) that applies a low frequency signal as the driving signal in case that the sensed temperature is low, the low frequency signal having a frequency of a driving signal used in case that the sensed temperature is normal (**low frequency 7-26 Hz for low temperature range 5-30 deg C** column 6, lines 20-24).

Allowable Subject Matter

4. Claims 2-8 , 10-16, 17-18, 19, 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Response to Arguments

5. Applicant's arguments filed on 2/13/2003, as to claims 1 and 9 have been fully considered but they are not persuasive.

As to claims 1 and 9, Applicant's argument as to cited art failing to teach a low frequency signal as the driving signal at a low temperature based on the sensed temperature is not valid : the examiner submits that frequency 7 Hz corresponds to the claimed low frequency signal and 5 degrees C corresponds to the claimed low temperature (see rejection above, Mizutome et al., column 6, lines 20-24).

As to claims 2 and 10, rejection is now withdrawn since Mizutome et al. fails to teach the high frequency signal being higher than the frequency signal used at the normal temperature.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Conclusion

7. The prior art made of record not relied upon is pertinent to Applicant's disclosure

US Patent 6,496,177 Buirton

Reference Burton is made of record as it discloses a liquid crystal display contrast control system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANCIS N NGUYEN** whose telephone number is **703 308-8858**. The examiner can normally be reached during hours 8:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached at 703 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service whose telephone number is (703) 306-0377.

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FRANCIS N NGUYEN

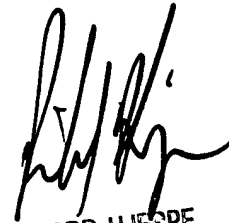
Examiner

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FN

July 7th, 2003



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600